



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,920	10/27/2000	Daryl S Meredith	0275A0168DVB	8371

7590 07/16/2002

Harness Dickey & Pierce PLC  
P O Box 828  
Bloomfield Hills, MI 48303

EXAMINER
----------

PETERSON, KENNETH E

ART UNIT	PAPER NUMBER
----------	--------------

3724

DATE MAILED: 07/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

MAILED  
JUL 16 2002  
GROL 0

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Paper No. 13

Application Number: 09/698,920  
Filing Date: October 27, 2000  
Appellant(s): MEREDITH ET AL.

---

Ryan Massey  
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 21 March 2002.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

As noted by Applicant, claims 53-58 are addressed in the 35 USC 103 rejection. Therefore claims 37-58 stand finally rejected under 35 USC 103.

**(4) *Status of Amendments After Final***

No amendment after final has been filed.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that groups of claims do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *Claims Appealed***

A substantially correct copy of appealed claims appears in the Appendix to the appellant's brief. The minor errors are as follows: On line 8 of claim 1, "rive" should be --drive--.

**(9) Prior Art of Record**

4,799,416	Kumasaka et al.	jan 1989
4,892,022	Cotton et al.	jan 1990

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 37-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumasaka et al. in view of Cotton et al.

Kumasaka shows a mitre saw with most of the recited limitations including a fixed guard (4) and a movable guard (9).

Kumasaka lacks a pivotable arbor shaft cover. However, in the art of mitre saws Cotton shows that it is well known to employ a pivotable arbor shaft cover (6). It would have been obvious to one of ordinary skill in the art to have modified Kumasaka by providing an arbor shaft cover, as taught by Cotton, in order to protect the operator from the spinning shaft while permitting easy access to the shaft. Given Kumasaka's structure, one of ordinary skill would obviously place the arbor shaft cover on the fixed guard.

In regards to claim 45, Kumasaka's mitre saw is not a sliding compound saw. Examiner takes Official Notice that such is well known in the art and would have been an obvious modification, in order to provide the ability to cut larger pieces of wood. It is noted that Applicant has not challenged this taking of Official Notice and therefore it is effectively admitted to be prior art as per MPEP 2144.03. (See footnote 1).

In regards to claims 39,41,42,44,47,49,50 and 51, Kumasaka's movable guard is disposed *inside* the fixed guard rather than *over* the fixed guard. Examiner takes Official Notice that such is well known in the art and would have been an obvious

modification, since it is known to work well either way. It is noted that Applicant did not seasonably challenge this taking of Official Notice and therefore it is effectively admitted to be prior art as per MPEP 2144.03. (See footnote 2).

In regards to the limitations of the torsional spring, applicant is well aware that it is common for rotary guards to be powered by torsional springs. Furthermore, Examiner takes official notice that it is old and well known for these torsional springs to be offset and pocketed. It would have been obvious to one of ordinary skill in the art to have provided Kumasaka with one of these offset, pocketed torsional springs, in order to automatically bias the guard to the safety position. (See footnote 3).

**(11) Response to Argument**

Group I – claims 37,38,45,46,54 and 57

Applicant argues that the addition of Cotton's arbor cover to the mitre saw of Kumasaka is an impermissible hindsight reconstruction made without motivation.

First let's cover some mitre saw basics; Both the saw to Kumasaka and the saw of Cotton have a guard designed to cover the entire periphery of the blade, and yet be movable to permit the saw blade to emerge and cut the wood. Both Kumasaka and Cotton teach that the arbor must be accessible without the complete removal of the guard, for the reason of easily removing the arbor nut and being able to swap the dull, old blade for a new, sharp blade.

Given Cotton's acknowledgement that the arbor must be accessible, Cotton could have just left a hole in his guard similar to what Kumasaka has, but he didn't. Cotton designed an arbor cover (6) pivotable over the guard-hole to protect the operator

from the spinning arbor, with the arbor cover (6) being pivotable outwards to permit access to the arbor nut.

The art of mitre saws is a highly competitive and international business, with hundreds of thousands, if not millions of units sold yearly by major manufacturers in America, Japan and Europe. One of ordinary skill is a mechanical engineer with many years of experience in designing and building mitre saws. This person having ordinary skill would notice Cotton's teachings of covering the arbor shaft guard-hole with a pivotable cover (6), and also would notice that Kumasaka's guard-hole would benefit from Cotton's teachings. One of ordinary skill would then analyze how to attach the arbor cover to Kumasaka and quickly realize that it would optimally be attached to the fixed guard (4), in order to best protect the operator from the spinning arbor.

Thus, the modification of Kumasaka by Cotton has clear motivation, and is not an impermissible hindsight reconstruction as set forth by Applicant.

Group II – claims 39,42,47 and 50

Applicant argues that *"absent a proper teaching, the modification of Kumasaka et al to make the movable guard 9 disposed over the fixed guard 4 is not obvious"*.

The examiner has taken official notice that in the art of mitre saws it is well known to have the movable guard be disposed over the fixed guard. This taking of official notice was made in the action mailed 09 May 2001. Applicant's response, received 13 August 2001, did not, in any way, challenge the taking of official notice. Nor did applicant even mention any of claims 39,42,47 and 50. As per MPEP 2144.03, if

Applicant does not challenge the taking of official notice in the next reply, then the object is taken to be admitted prior art. (See footnote 2).

Kumasaka has the movable guard disposed *inside* the fixed guard. Applicant has effectively admitted that there is prior art with the movable guard disposed over the fixed guard. The courts have ruled that a simple reversal of parts is not inventive if the operation of the device is not thereby modified. Therefore it would have been obvious to one of ordinary skill to have placed the movable guard over the fixed guard, since the operation of the device would not thereby be altered.

Group III – claims 53,55,56 and 58

Applicant argues that "*there is no proper teaching or suggestion for an offset coil spring*". Examiner reads this to be a challenge to the taking of official notice, and hereby provides references as set forth in footnote three. Since there now is "a proper teaching", applicant's arguments are rendered moot.

**Footnote 1**

The difference between independent claims 37 and 45 is that claim 37 is drawn to a simple oscillating mitre saw, such as shown by Kumasaka, and claim 45 is drawn to a mitre saw that both oscillates and slides. Examiner took official notice that compound sliding miter saws were old and well known, and that it would have been obvious to convert Kumasaka simple mitre saw into a compound sliding mitre saw, in order to cut larger pieces of wood. Although Applicant did not challenge Examiners Official Notice, Examiner hereby provides Sasaki et al. (5,524,516).

If, for some unseen reason, the board feels that Sasaki should be formally incorporated into the rejection, then the application should be remanded for the examiner to do just that.



Art Unit: 3724

**Footnote 2**

Even though Applicant did not seasonable challenge the taking of Official Notice, Examiner would like to provide a reference, namely Terpstra (5,203,245) who shows a lower movable guard (25) that is movable to a position *over* the fixed guard. It would have been obvious to one of ordinary skill in the art to have used (as set forth in the final rejection) the configuration of Terpstra, in lieu of Kumasaka's configuration, since there is no significant difference in operation between the two.

If, for some unseen reason, the board feels that Terpstra should be formally incorporated into the rejection, then the application should be remanded for the examiner to do just that.

**Footnote 3**

Applicant has challenged the Examiner's taking of Official Notice that it is well known to employ offset torsional springs to bias a lower guard into a blade-covering position. Unlike the previous two Official Notices, this Official Notice was first made in the final rejection, and therefore the challenge is seasonable. Examiner hereby provides references;

The patents to Brundage et al. (4,934,233) and Dehari et al. (4,774,866) show torsion springs for returning the lower guard to the blade-covering position.

Brundage shows, in figure 12, a torsional spring (149). It would have been obvious to one of ordinary skill in the art to have further modified Kumasaka, as set forth in the final rejection, by adding the torsional spring of Brundage, in order to insure the lower guard returns to the blade-covering position, thus insuring operator safety.

Alternately, Dehari shows an offset torsion spring (20) and linkage system (17,18) for biasing the lower guard to the blade-covering position. It would have been obvious to one of ordinary skill in the art to have further modified Kumasaka, as set forth in the final rejection, by adding the offset torsional spring and linkage of Dehari, in order to insure the lower guard returns to the blade-covering position, thus insuring operator safety.

If, for some unseen reason, the board feels that Brundage or Dehari references should be formally incorporated into the rejection, then the application should be remanded for the examiner to do just that.

Application/Control Number: 09/698,920  
Art Unit: 3724

Page 11

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



KENNETH E. PETERSON  
PRIMARY EXAMINER

kp  
July 11, 2002

Conferees  
Ashley Boyer *AB*  
Allan Shoap *aj*

HARNESS DICKEY & PIERCE PLC  
P O BOX 828  
BLOOMFIELD HILLS, MI 48303